

REMARKS

In the above-mentioned Office Action, all of the pending claims, claims 1-20, were rejected. Claims 1-11 were rejected under §102(e) over Chin. And, claims 12-20 were rejected under §112, first paragraph. Objection was further made to claim 12 for the recitation of informalities in improper claim form.

Responsive to the rejections of the claims, claims 12-20 have been cancelled. And, new claim 21 has been drafted in a manner believed to be in conformity with §112, first paragraph, and to recite subject matter that is patentably distinguishable over Chin.

Support for the recitations of new claim 21 can be found, for instance, on page 17, line 13 through page 21, line 16. More specifically, the recitation of the uplink channel correlation matrix former can be found, for instance, on page 18, line 19 through page 19, line 3. Support for the recitation of the downlink channel correlation matrix former can be found, for instance, on page 19, lines 4-17. And, support for the recitation of the antenna weighting value selector can be found, for instance, on page 21, lines 10-16.

Claim 21 is further believed to be distinguishable over Chin, amongst other things, for the reason that Chin fails to disclose a downlink channel correlation matrix former adapted to receive discrete Fourier-transformed representations of an uplink channel correlation matrix.

With respect to the rejection of claim 1 over Chin, the claim has been amended in manners believed to distinguish better the invention of the present application over the cited reference of Chin. As now-amended, the claim further recites a first-channel correlation matrix generator. Chin fails to disclose a correlation matrix generator or a correlation matrix. While column 5, lines 63-64 of Chin make reference to a channel covariance matrix, no reference is

Appl. No. 10/080,954

Amdt. dated October 14, 2004

Reply to Office Action of July 6, 2004

made to a correlation matrix. Additionally, the first-channel correlation matrix generator is recited to be defined in terms of first Fourier series of first values. And, the recitation of the second-channel, channel characteristic calculator has further been amended to recite that the indications of the characteristics of the second channel are also defined in terms of the first Fourier series coefficients of the first values. No corresponding disclosure is made in Chin.

Claim 11 has been analogously amended, and is believed to be patentably distinguishable, as now-amended, over Chin for the same reasons as those given with respect to claim 1.

Amendments made to various of the dependent claims dependent upon claim 1 have been made responsive to amendments to their parent claims. As the dependent claims include all of the limitations of their respective parent claims, these claims are also believed to be patentably distinguishable over Chin for the same reasons as those given with respect to their parent claim.

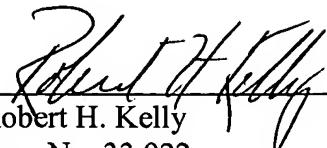
Amendments proposed to the drawings are made to add missing reference numerals and to make reference to the antenna pattern configurations 52 and 54 noted on page 11 of the specification.

In light of the foregoing, independent claims 1 and 11, and dependent claims 2-10 are believed to be in condition for allowance. Accordingly, reexamination and reconsideration for allowance of these claims is respectfully requested. Additionally, newly-presented claim 21 is believed to recite patentable subject matter. Accordingly, examination and consideration for allowance of this claim is also respectfully requested. Such early action is earnestly solicited.

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Respectfully submitted,

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